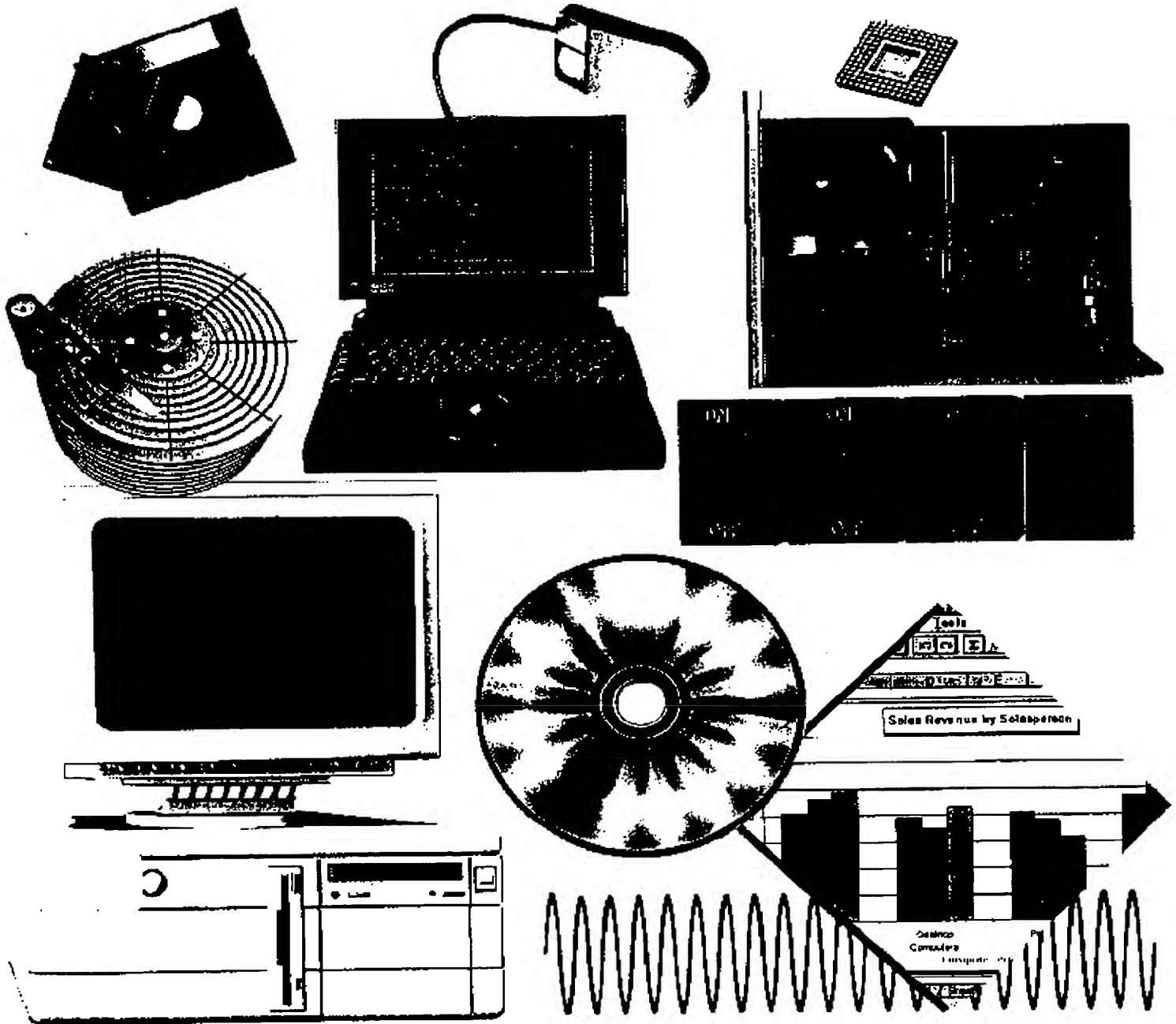# COMPUTERS

## A VISUAL ENCYCLOPEDIA
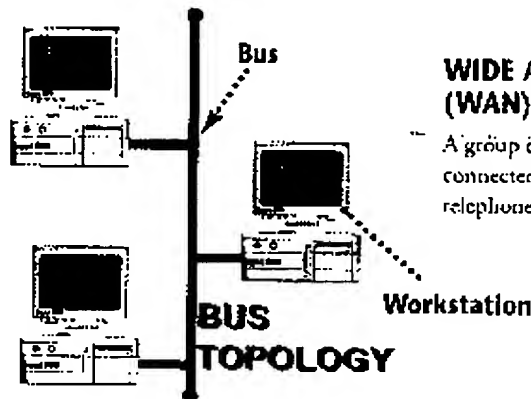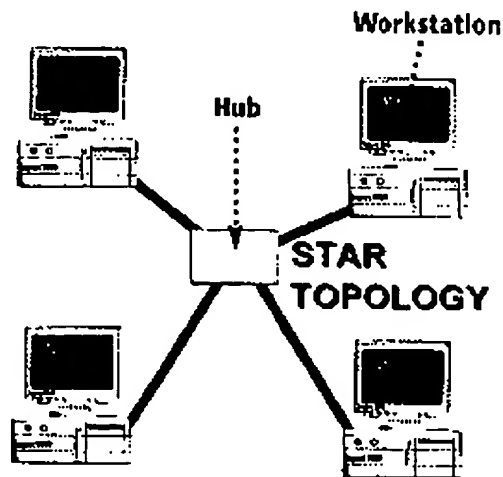
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# Network c ntinued

## How Does It Work?

The PCs on a network are connected in various ways, called topologies. There are three basic network topologies: star, bus, and token ring.

In a star network, PCs are connected to a central hub, a computer that is connected to the server. The hub acts as a resource manager and a traffic cop for the network. But if it fails, that part of the network fails. In addition, star networks are costly because of all the cable that's used.

In a bus network, PCs are connected to a central cable called the bus. Bus networks are less costly because they use less cable, however, if the bus fails, the entire network fails. Also, traffic along the bus can get congested, increasing the amount of time it takes to get a file.

In a token ring network, PCs are connected to each other in a kind of ring. Information is passed from one PC to the next, until it reaches its destination. If one PC fails, the entire network can fail. Adding new PCs to the network is difficult, but this topology uses the least amount of cable so it is the least costly.
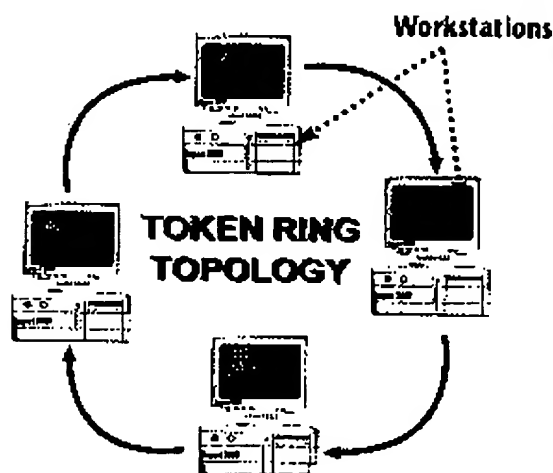
**Workstation**

**Hub**

## STAR TOPOLOGY

### WORKSTATION
Each individual computer that is connected to the file server.

**Bus**

## WIDE AREA NETWORK (WAN)
A group of local area networks that are connected by satellites, modems, or telephone wires.

**Workstation**

## BUS TOPOLOGY

**Workstations**

## TOKEN RING TOPOLOGY

### MODEM
A device used to communicate with other computers across telephone lines.

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